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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,071	10/21/2003	Vincent J. Gatto	7391/80785	2821

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Dennis H. Rainear
ETHYL CORPORATION
Patent and Trademark Division
330 South Fourth Street
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EXAMINER

MCAVOY, ELLEN M

ART UNIT PAPER NUMBER

1764

DATE MAILED: 12/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/689,071

Applicant(s)

GATTO, VINCENT J.

Examiner

Ellen M McAvoy

Art Unit

1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-22, 24, 39-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-22, 24, 39-57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Claim Objections

Claims 18, 39 and 40 are objected to because of the following informalities: The term "molybdenum" is misspelled in claim 18, line 3, and in claim 39, line 11; the term "lubricant" is misspelled in claim 39, line 2, and in claim 40. Appropriate correction is required.

Claim Rejections - 35 USC § 112

Claims 39-57 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. THIS IS A NEW MATTER REJECTION.

In independent claim 39, parts (c) and (d), the phrase "wherein the total base number (TBN) as determined by ASTM D2896 is less than 50mg KOH/gram" is considered to be new matter. The specification does not teach such a limitation. Although the Examples set forth on pages 16-18 include TBN values such as "32.3 mg KOH/g" for Additive Sample 1 and Table 2 on page 18 contains Additive Samples 2-9 that contain various TBN (mg KOH/g) values ranging from 28.3-47.4, such is not support for the newly added claim limitation.

In independent claim 45, lines 4-5, the phrase "in the absence of carbon disulfide" is also considered to be new matter. There is no support in the specification for such a limitation. Not teaching carbon disulfide as a reactant is not support. Teaching that the organomolybdenum

complex reaction products are substantially sulfur-free (specification page 12) is not support for excluding a particular reactant disclosed in the prior art.

Claim Rejections - 35 USC § 102/103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 39, 41-44, 45-53 and 57 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Nalesnik et al (6,103,674).

As set forth in the previous office action, Nalesnik et al ["Nalesnik"] disclose oil-soluble molybdenum multifunctional additives for lubricant compositions which are prepared by reacting (a) an unsaturated or saturated ester or acid, (b) a diamine, (c) carbon disulfide, and (d) a molybdenum compound. Suitable ester reactants include triglycerides such as vegetable oils. See column 6, lines 7-49. Aliphatic diamine reactants are set forth in column 6, line 50 to column 7, line 40, and may include an alkoxyalkylene group when W is oxygen. Molybdenum trioxide is the preferred molybdenum source and the mole ratio of the diamine to vegetable oil is

typically in the range of 0.5 to 2.0. See column 7, lines 44-52 and column 8, lines 8-9. Nalesnik teaches that the amount of molybdenum incorporated into the product can range from 2 to 8 weight percent. See column 8, lines 27-28. Applicant's reaction product differs from Nalesnik by not including carbon disulfide in the reaction. However, applicant's open-ended claim language "comprising" allows for the addition of other reactants such as carbon disulfide. Additionally, Nalesnik discloses in example 4 a lubricating oil organo molybdenum additive formed without the use of carbon dioxide, i.e., canola oil is first reacted with N-methyl-1,3-propanediamine to form an intermediate which is then reacted with molybdenum trioxide. Thus, while Nalesnik teaches the use of carbon disulfide in forming an organo molybdenum additive, Nalesnik also teaches lubricant additives wherein the carbon disulfide reactant has been omitted. Accordingly, applicant's claims if not anticipated by 35 U.S.C. 102, would be obvious under 35 U.S.C. 103. The examiner is of the position that in independent claim 39, the organomolybdenum composition in parts (b), (c) and (d) which "comprises" the reaction products of (i) at least one fatty oil; (ii) at least one mono-alkylated alkylene diamine; and (iii) a molybdenum source; are taught by Nalesnik. The provisos of molar ratio and TBN do not distinguish the claim over the prior art.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686

F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 18-22, 24 and 39-57 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-34 of U.S. Patent No. 6,509,303 (Gatto). Although the conflicting claims are not identical, they are not patentably distinct from each other because the reaction product of a fatty oil, a diamine, and a molybdenum source, and lubricating oil compositions containing the reaction product may be the same.

Claims 18-22, 24 and 39-57 are also rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-44 of U.S. Patent No. 6,645,921 (Gatto). Although the conflicting claims are not identical, they are not patentably distinct from each other because the compositions comprising the reaction product of a fatty oil, a diamine, and a molybdenum source, in which the reaction product is formed in the absence of carbon disulfide and volatile organic solvent may be the same.

The terminal disclaimer filed 24 September 2004 was not approved because the fee was not authorized. On page 3, the following phrase does not include a fee amount:

"The fee of required by 37 § C.F.R. 1.20(d) can be charged to our deposit Account No. 06-1135, regarding order No. 7391/80785."

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

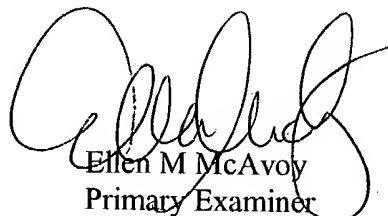
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen M McAvoy whose telephone number is (571) 272-1451. The examiner can normally be reached on M-F (7:30-5:00) with alt. Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ellen M McAvoy
Primary Examiner
Art Unit 1764

EMcAvoy :
December 6, 2004